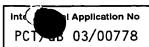


INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 6120653	FOR FURTHER see Notification of (Form PCT/ISA/2	of Transmittal of International Search Report 220) as well as, where applicable, item 5 below.				
International application No.	International filing date (day/month/year)	(Earliest) Priority Date (day/month/year)				
PCT/GB 03/00778	18/02/2003	31/05/2002				
Applicant						
HITACHI, LTD.						
This International Search Report has bee according to Article 18. A copy is being tr	n prepared by this International Searching Aut ansmitted to the International Bureau.	hority and is transmitted to the applicant				
This International Search Report consists X It is also accompanied by	of a total of sheets. a copy of each prior art document cited in this	s report.				
Basis of the report						
a. With regard to the language, the language in which it was filed, un	international search was carried out on the ba less otherwise indicated under this item.	sis of the international application in the				
the international search v Authority (Rule 23.1(b)).	vas carried out on the basis of a translation of	the international application furnished to this				
was carried out on the basis of th	e sequence listing:	nternational application, the international search				
	onal application in written form.	m				
I 🛱 "	ernational application in computer readable for	III.				
<u> </u>	furnished subsequently to this Authority in written form.					
the statement that the su	o this Authority in computer readble form. bsequently furnished written sequence listing o	does not go beyond the disclosure in the				
international application	as filed has been furnished.	is identical to the written sequence listing has been				
furnished						
2. X Certain claims were fou	ind unsearchable (See Box I).					
3. Unity of invention is lac	eking (see Box II).					
4. With regard to the title ,						
X the text is approved as s	ubmitted by the applicant.					
the text has been establi	shed by this Authority to read as follows:					
5. With regard to the abstract,						
1 1	ubmitted by the applicant.					
the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.						
6. The figure of the drawings to be put	olished with the abstract is Figure No.	1				
as suggested by the app	licant.	None of the figures.				
because the applicant fa	iled to suggest a figure.					
because this figure bette	r characterizes the invention.					

IN TRNATIONAL SEARCH REPORT



A. CLASSIFICATION OF SUBJECT MATTER IPC 7 H04B1/04

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 HO4B HO4L HO3G

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

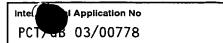
EPO-Internal, WPI Data, PAJ

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 939 951 A (BATEMAN ANDREW ET AL) 17 August 1999 (1999-08-17) abstract figures 8-10 column 4, line 46-48 column 9, line 41-46	1-10
Α	EP 1 043 833 A (LUCENT TECHNOLOGIES INC) 11 October 2000 (2000-10-11) abstract column 9, line 55-58 column 10, line 49-54 column 11, line 19-23 column 15, line 21-35 figures 4,5 -/	1-10

Further documents are listed in the continuation of box C.	Patent family members are listed in annex.
Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed	 "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. "&" document member of the same patent family
Date of the actual completion of the international search	Date of mailing of the international search report
13 June 2003	25/06/2003
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk	Authorized officer
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	GONZALEZ GUTIER, B

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		PC17-4B 03/00//8
.(Continu	ation) DOCUMENTS CONSIDERED TO BE RELEVANT	
ategory °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	SU H-J ET AL: "ADAPTIVE CLOSED-LOOP POWER CONTROL WITH QUANTIZED FEEDBACK AND LOOP FILTERING" IEEE TRANSACTIONS ON WIRELESS COMMUNICATIONS, IEEE, PISCATAWAY, US, vol. 1, no. 1, January 2002 (2002-01), pages 76-86, XP001143807 ISSN: 1536-1276 figures 1-4,9,11 page 79, column 7 page 81, column 11 page 82, column 13 page 85, column 19 page 85, column 20 page 86, column 21	1-10

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FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box I.2

Claims Nos.: 11,12

The subject-matter of the claims 11 and 12 is defined by references to the description and/or the drawings. According to Rule 6.2(a) PCT, claims should not contain such references except where absolutely necessary, which is not the case here. These claims fail to comply with the prescribed requirements to such an extent that a meaningful search could not be carried out, according to Article 17(2)(a)(ii)PCT.

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.





Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)
This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:
Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:
2. X Claims Nos.: 11,12 because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically: see FURTHER INFORMATION sheet PCT/ISA/210
3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).
Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)
This International Searching Authority found multiple inventions in this international application, as follows:
As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
Remark on Protest The additional search fees were accompanied by the applicant's protest. No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

on on patent family members

Inte	Application No
PCT/ ub	03/00778

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
US 5939951	A	17-08-1999	CA EP WO JP	2222091 A1 0835549 A1 9637948 A1 11505979 T	28-11-1996 15-04-1998 28-11-1996 25-05-1999
EP 1043833	Α	11-10-2000	EP	1043833 A1	11-10-2000